

REMARKS/ARGUMENTS

Claims 1 and 6-12 are currently amended.

The amendments to Claims 1, 6, 11 and 12 are in accordance with the Examiner's suggestions.

The amendments to Claims 7-10 correct a typographical error wherein the claims should have been dependent upon Claim 6. The amendment is fully support throughout the specification and in the originally filed claims. Furthermore, the amendment obviates the double patenting rejection.

The rejection of Claims 1-21 under 35 U.S.C. § 112, second paragraph is respectfully traversed.

The amendments to Claims 1, 6 and 11 obviate the rejection. Withdrawal of the rejection is requested.

The rejections of Claims 1-13, 15-17, 20 and 21 under 35 U.S.C. § 102(e) over Matsushita (U.S. 6,653,549) and Claims 1-21 under 35 U.S.C. § 103(a) over Matsushita are respectfully traversed.

Applicants are herewith perfecting their claim to priority by the submission of the certified English translation of the German foreign priority application. The German foreign priority document antedates Matsushita, and therefore Matsushita is not prior art. Withdrawal of the rejections is requested.

The rejections of Claims 6, 11-13, 15-17 and 20-21 under 35 U.S.C. § 102(b) over Takehara (U.S. 5,669,987) and Claims 1-21 under 35 U.S.C. § 103(a) over Takehara are respectfully traversed.

Takehara discloses an apparatus to detect a defective photoelectric conversion element. This achieved by a power generating system having the solar cell array constituted by a plurality of parallel-connected solar cell strings each consisting of a plurality of series-

connected solar cell modules. The system includes electrical parameter detection units for measuring electrical parameters and solar cell strings, a comparing unit for mutually comparing the detected electrical parameters, and the unit for warning of an abnormality on the basis of the comparison result (see Abstract). In particular, the comparing unit compares the output of a solar cell string relative to nominal output value of all the other solar cell strings, and if the output is lower than the nominal value, the entire particular solar cell string is shut off (see col. 5, lines 15-48 and col. 9, lines 25-39). Applicants further note that Takehara requires at least two solar cell strings connected in parallel for their invention to function properly (see column 4, lines 7-25). In fact, several to several hundred parallel circuits are preferred (see col. 4, lines 9-10), and if the number of strings is small, it is difficult to perform accurate defect detection (see col. 4, lines 13-16). Thus, Takehara's invention relies on the existence of at least one neighboring solar cell string to properly perform its function.

However, the present invention utilizes at least two individual solar cells (which would be similar to the smaller solar cell modules of Takehara¹), to detect the difference of incident light between the individual solar cells. The comparison is not performed between groups of solar cell strings as in Takehara, but at a smaller level using at least two individual solar cells (solar cell modules of Takehara) within a solar cell module (solar cell string of Takehara) to detect a difference in the light intensity. Thus, the present invention does not rely on the output of numerous neighboring modules, and can function properly within one single solar cell module.

Therefore, Takehara fails to disclose, suggest or motivate the present invention. Furthermore, the present invention provides substantial benefit over Takehara as the

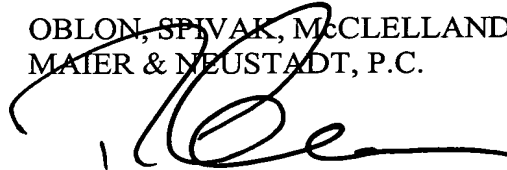
¹ Applicants have interpreted the prior art such that solar cell strings of Takehara are similar to solar modules of the present invention; and solar modules of Takehara is similar to the solar cell of the present invention.

requirement for (numerous) neighboring solar cell strings of Takehara are removed. In view of these remarks, withdrawal of the rejections is requested.

Applicants submit that the application is now in condition for allowance. Early notification of such allowance is earnestly solicited.

Respectfully submitted,

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